USAF Medical Service
Digest

Winter 1989
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Air Force Blue in Red Square

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USAF Medical Service Digest

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U.S. MEDICAL SERVICE officers with their Soviet counterparts and other hosts stand before Moscow statue representing peace.

Message from the Surgeon General

Recent developments in the Soviet Union, Central America and in Eastern Europe portend great change in the Air Force of the 1990s. Though none of us can accurately predict the future, it's clear that the years ahead will be filled with challenges and opportunities. As we begin a new decade, it's evident that our Air Force leaders—and especially the chief of staff—are committed to continued improvement of the USAF Medical Service. We're starting to see the tangible results of that commitment in the form of additional resources.

When I began my tour as surgeon general, I noted that there were five major areas which demanded our continued attention. These focal points are worth repeating as we move into the next decade:

*Quality of Air Force Medicine. I'm sure you share my great sense of pride in the quality of Air Force medicine, but it would be a mistake to rest on our laurels. Providing high quality health care is an ongoing process that requires the best efforts of every Medical Service member.

*Accessibility to Outpatient Care. We have to do a better job of providing patient access to our direct care system. Improvement won't occur overnight. We must enhance the support we furnish our health care providers, improve our telephone systems, upgrade our facilities, and accomplish a host of varied tasks to improve accessibility.

*Retention of Critically Short Specialties. Our ability to deliver high quality Air Force health care in peacetime and in combat requires that we minimize our personnel shortages. Though some of the special programs of the past may have disappeared, medical leaders at all levels must sustain their retention activities.

*Air Force Managed Health Care. We must constantly strive to maintain and improve an Air Force health care delivery system which is responsive to the Air Force mission. Though basic policy guidance may come from higher headquarters, responsibility and accountability for health care delivery must be retained at the local level.

*Medical Readiness Training. Responsiveness to wartime contingencies and peacetime emergencies is the fundamental imperative of the Air Force Medical Service. Responsiveness requires preparation, and preparedness means training. We've already made some improvement in the content and timing of our medical readiness training, and I look for more in the future.

Maintaining our focus on each of these areas will be the great challenge of the future. I urge you to join me in renewed dedication to the Medical Service of the 1990s.

Monte B. Miller

MONTE B. MILLER
Lieutenant General, USAF, MC
Surgeon General

Cutting the Umbilical Cord: The USAF Medical Service Achieves Independence

By George M. Watson Jr., Ph.D.

The orders that established the USAF Medical Service in 1949 were a product of drawn out negotiations and compromises between the services which began during World War II and continued after the Air Force attained independence in September 1947. (1)

What were some of the divergent views held by the services and their medical leadership? What were the problems encountered by Army Air Forces (AAF) medical personnel in their efforts to free themselves from the technical grasp of the Army?

Arnold's Views

Anticipating post war separate service status for the Air Force, Gen. Henry H. "Hap" Arnold, commanding general, AAF in August 1945 reminded his commanding officers of the importance of the medical service and of, "its position and relationships in the organizational structure of each echelon," within the Air Forces. Acknowledging the tremendous contribution the medical services made during the war, he listed some fundamental principles which he believed essential to the function and operation of the medical service in the AAF. General Arnold recognized that for the surgeon to be responsible for the professional care of the sick and wounded he had to be responsible for the control of the personnel, means, and facilities required for performance of his mission. General Arnold was adamant that nonmedical administrative supervision ought never to inhibit the medical service from doing its job. In addition, he maintained that the commanding officer at each echelon was directly responsible for the character of the medical service and the surgeon was to be his advisor in respect to all medical matters. (2)

Air Surgeon's Concerns

When considering the possible future transfer of Army medical officers to the Army Air Forces, one area that concerned the air surgeon, Maj. Gen. David N. V. Grant, was promotions. He did not want his people to lose seniority because of a transfer, and he wanted medical service positions established that were equivalent in rank to other Air Force jobs of comparable responsibility and training. General Grant also desired to ensure advancement opportunities to general officer ranks similar to those enjoyed by officers who worked for the surgeon general of the Army. (3)

Post War Medical Planning

Nonetheless, the huge medical operation that General Grant oversaw—consisting of some 65,000 beds in both regional and station hospitals, and 7,500 doctors—was soon to be dismantled. Indeed, for the AAF Medical Service, the period immediately following the war was characterized by a shift in mission from medical care of the sick and wounded to mobilization of the Medical Service. By mid-1946 only 75 hospitals and 6,000 beds remained.

The program for training medical officers in civilian institutions was discontinued and placed entirely in the services general hospital system. A request for assignment of several general hospital installations to the AAF as compensation for the regional system was rejected by the Simpson Board (4) and later by General Eisenhower. The Air Force was not satisfied with the Army being responsible for some of its medical service.

While the Army continued to control the AAF medical functions, interest and planning for a War Department reorganization that would unify the Navy and Army under a single civilian secretary and the establishment of a Department of the Air Force equal in status to the other services provided an opportunity to rethink the medical organization by representatives at the highest levels of government. In preparation for discussions on the subject of independence, the new air surgeon, Maj. Gen. Malcolm C. Grow, who replaced General Grant in January 1946, directed his staff to prepare an organizational concept for the Medical Service within the proposed national military establishment. In January 1947 the air surgeon's positions were presented before the Hall Board (5) which was convened by the War Department to anticipate and reconcile Army and Air Force views on unification before the 1947 congressional hearings on this subject. Some of the basic recommendations of the

THREE WHO SUPPORTED a separate medical service. From left: Air Force Chief of Staff, Gen. Carl Spaatz; Secretary of the Air Force Stuart Symington, and Gen. Hoyt S. Vandenberg all aided the effort to establish a separate Air Force Medical Service. General Spaatz kept the hope alive after the passage of the National Security Act, and with Maj. Gen. Malcolm C. Grow and others was able to convince Symington to support their cause. General Vandenberg would later sign General Order No., 35 announcing the establishment of the Air Force Medical Service. This photo was taken during the spring of 1948 at the time of General Spaatz's retirement and his replacement by General Vandenberg. Photo by DoD.

Mrs. Malcolm C. Grow

We announce with regret the passing of Mrs. Winifred A. Grow, widow of Major General Malcolm C. Grow, the first surgeon general of the United States Air Force. Mrs. Grow died Jan. 17, 1990 at Annapolis, Md. General Grow died at USAF Hospital Andrews, Washington, D.C., Oct. 20, 1960.

Air Surgeon were agreed to by the Hall Board. The new unified defense organization would provide the Air Force its minimum medical requirements. The Air Force would participate in: policy formulation; medical service for troop units and installations; a full professional career for its medical personnel, including high staff positions and general hospital service; an aviation medicine program, and all echelons or branches of medical accompaniment for its personnel. However, the Hall Board clearly stated that independence did not mean that the Air Force could set up separate special services, such as its own medical corps. There was to be no duplication in the general hospital or medical supply system. This meant that general hospitals for the Army and the Air Force under the policy control of a joint medical agency of the Joint Chiefs of Staff would be operated by the Army, with the Air Force furnishing a proportionate part of the staff and command personnel.... (6)

As expected, General Grow had some reservations about the proposed status of the AAF medical profession under unification. He clung to his often expressed position that the Air Force Medical Service in the unified department must be awarded a recognition in keeping with its specialized mission and the professional character of its composition. General Grow argued that it would be doubtful that the American Medical Association would professionally recognize the Air Force Medical Service if it were not accorded legal status as a corps or department within the Air Force. He noted that medical departments were legally authorized in the Army and the Navy. Thus he questioned whether common legislative programs sponsored by the unified department would be applicable to the Air Force Medical Service if it did not enjoy the same status as the Army and the Navy medical departments. He further maintained that the Air Force Medical Service had to be as attractive as the Army and the Navy to compete for qualified professional personnel. The general believed, however, that any thinking physician would opt for a service whose composition and mission were legally recognized. In addition, General Grow thought that the independence of action in the professional field which was necessary for medical officers employed by the government services might be open to serious question if the Air Force Medical Service were not granted legal recognition. Finally, General Grow called for appropriate legislation that would authorize a medical department within the United States Air Force. (7)

In addition to Medical Corps members, there were other AAF personnel who favored a separate medical service when the Air Force achieved independence. Maj. Gen. Hugh J. Knerr, who was a member of the Hall Board, thought that the War Department's technical services were trying to keep the Air Force dependent upon them after unification. Army Chief of Staff Dwight D. Eisenhower, hearing of the AAF's fears of not having sufficient War Department support, reminded the commanding general of the AAF, Gen. Carl Spaatz, of their earlier agreement regarding separate services for the Air Force: (8)

"I have repeatedly stated that if there develops an intention either in Congress or elsewhere to set up such completely separate special services, I will oppose the whole plan with all the emphasis I can possibly develop. In this you have agreed with me unreservedly, and yet it appears that many others interpret certain features of the Hall Board report as announcing such an intention."

General Eisenhower was particularly disturbed about the AAF Medical Corps. While he endorsed the consolidation of medical organization, he opposed the specialization of aviation medicine. The focus of Eisenhower's effort was to avoid duplication wherever possible. He thought that any attempt to assign specialized personnel to the Air Force should come from the secretary of national defense.

Eisenhower conferred with General Spaatz, who reaffirmed that he had every intention of adhering to their agreement on separate services. For Gen. Spaatz and other Air Force leaders, independence for the Air Force was the most important objective, and compromises could be worked out after the attainment of that goal.

General Hall told Eisenhower that the intention of his study effort was to avoid duplication and to advocate cross-servicing and cross-procurement. General Hall added that the board had called for organized medical service for troop units and installations while one department operated the general hospital and medical supply systems. Nevertheless, to quiet the protestations of Eisenhower and Secretary of War Robert P. Patterson, General Hall recommended that a statement be attached to the report that read: (9)

"In no case will this report be interpreted to violate either of these basic provisions: (1) The Air Force will not set up additional technical services as an immediate result of unification; and (2) Service support of the Air Force by the Army will continue following unification with the understanding that the secretary of national defense will effect such changes in services as later prove desirable."

The word that promised some hope for the Air Force to establish its own services was "immediate." Nevertheless, for the foreseeable future General Spaatz directed that the Air Force follow the dictates of the Hall Board report when planning for unification. (10)

Struggle For Autonomy Continues

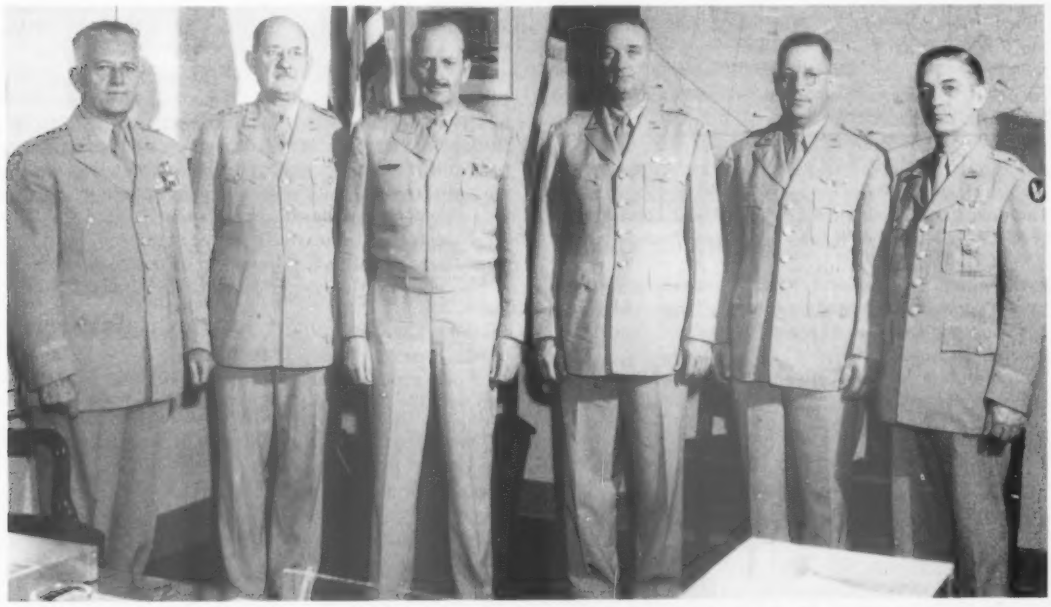
The National Security Act of 1947, which was a compromise among the services to achieve a centralized national military establishment under a civil-

ian secretary of defense, and attain equal status for the Air Force with the Army and Navy, did not address the problem of medical organization. The Air Force Medical Service did not like its status as an appendage of the Army Medical Service and made its position clear: (11)

"The Air Force has not attained parity so long as an operational veto remains in the hands of the Army, whose failure or inability to provide the medical attendance required by the Air Force in emergencies might jeopardize the mission of the latter arm ... it is difficult to minimize the effect of the present organization upon the morale of these medical officers who have served with the Air Force and contributed so much to the advancement of aviation medicine."

Nonetheless, after assuming office, Secretary of Defense James Forrestal established an interdepartmental medical committee composed of the Army and Navy surgeon generals, the air surgeon and one civilian physician, Paul R. Hawley (12), to study the three medical services and recommend any appropriate changes. Sensing that this committee provided an opportunity to reopen the organization question for his service, General Grow wrote to Stuart Symington, the first secretary of the Air Force, to solicit his support for a separate medical service. General Grow flatly stated that the Air Force required a medical service worthy of the "splendid organization it is to support," a medical service designed to "fit into airplanes," and cope with the medical problems of the flier. He did not believe the Army Medical Department was prepared or even willing to meet this requirement and recommended a departure from any course of action which would deny establishment of an Air Force Medical Service. (13) In his more specific presentation before the Hawley Board, as the Subcommittee on Medical and Hospital Services of the Armed Forces was subsequently called, General Grow while again calling for an independent medical segment within the United States Air Force, also wanted Forrestal to initiate a transfer order that would equitably divide the personnel, material, installations, and funds of the Army Medical Department between the Army and the Air Force based on the command strengths of the two arms. (14)

By mid-1948, Air Force support for a separate medical service was almost universal. In September 1948 Secretary Symington recommended to Secretary of Defense Forrestal that the medical services should be a unified pattern of operation. The air secretary suggested that the operation of general hospitals, procurement of medical supplies and other functions which lent themselves to common service should be unified under control of the secretary of defense. Symington believed each department should operate its own medical elements and participate on a parity basis in all phases of medical services. The air surgeon expressed his views before both the Voorhees and Eberstadt Committees of the Hoover Commission which was called to study the organization of the



KEY FIGURES in the Air Force Medical Service: From left: Maj. Gen. Malcolm C. Grow, Brig. Gen. George R. Kennebeck, Maj. Gen. Harry G. Armstrong, Brig. Gen. Dan C. Ogle, Brig. Gen. Albert H. Schwichtenberg and Brig. Gen. William H. Powell Jr. Photo by DoD.

executive branch of the government. The position of a separate Air Force Medical Service was approved by both committees. Then direct negotiations by representatives of the surgeon general and the air surgeon resulted in the establishment of a separate Air Force Medical Service in June 1949. Under the agreement the new medical service could determine its own medical requirements; provide for a program of base level and troop unit medical service, worldwide; participate in manning and administering medical technical service activities operated by the Department of the Army, including the Army general-type hospital system; and be responsible for conducting an aviation medicine program, to include an aeromedical center. Subsequently, six corps components of the USAF Medical Service were established—Medical, Dental, Veterinary, Women's Medical Specialists, Nurse and Medical Service. (15)

To achieve independence in 1947 the Air Force had to make compromises. One included accepting Army control of its medical service. It took the Medical Service two additional years to separate from the Army. Persistence can best characterize its efforts to attain that goal. Members took every opportunity to expound their belief in the essential importance of a separate medical service, and convinced the Air Force leadership of the soundness of their views.

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Ed. note (General Arnold, who earned his nickname, "Hap" at the U.S. military Academy, is considered the father of the Air Force. General Arnold assumed command of the Army Air Corps at the start of World War II. He died in Sonoma, Calif., in 1950.

References

1. The orders that created the USAF Medical Service were General Order No. 35 of 8 June 1949, and Transfer Order No. 36 of 12 May 1949.
2. AAF Letter 25-74, H.H. Arnold, commanding general, Army Air Forces to commanding general, Major AAF Commands, Subject: Relation of the AAF Medical Service To Command, 20 August 1945.
3. Memorandum for chief of air staff from Maj. Gen., David N. V. Grant, the air surgeon, 25 September 1945, Subject: Integration of Medical Department Officers into the Regular Air Force.
4. Lt. Gen. William H. Simpson had commanded the U.S. Ninth Army in World War II. The board he chaired was tasked in late 1945 to examine into the War Department organization. The board was deliberately weighted against the Army Service Forces. Its members were drawn chiefly from technical services and from General Eisenhower's staff. They opposed continuance of Army Service Forces because they felt it had become far too large and had wielded excessive power.
5. The Hall Board was named after its chairman, Army Maj. Gen. William E. Hall.
6. *Report to Chief of Staff United States Army on Army and Air Force Organization Matters Under Unification*, Hall Board Report, January-March 1947, pp. 64-67.
7. Memorandum for the Air Judge Advocate: AC/AS-1, from Maj. Gen. Malcolm C. Grow, the air surgeon, 14 March 1947, Subject: Integration of Medical Department Officers.
8. Memo for Gen. Carl A. Spaatz, CG, AAF, fr General Dwight D. Eisenhower, CSA, Mar 21, 1947, RG 340 (SAF), Air Bd, Gen File, 1945-1948, Box 12, National Archives.
9. Hall Board Report, *Op. Cit.*; See also, Herman S. Wolk, *Planning and Organizing the Postwar Air Force 1943-1947*, (Washington: Office of Air Force History, 1984), p. 196.
10. Memorandum for General Upston, deputy, AC/AS-1, from Maj. Gen. Malcolm C. Grow, the air surgeon, 8 July 1987, Subject: Integration of the Professional Corps; Memorandum for General Grow from Maj. Gen. I. H. Edwards, USA, AC/AS-1, 11 September 1947, Subject: Integration of the Professional Corps.
11. Quoted from Herman S. Wolk, *Planning & Organizing the Postwar Air Force, op. cit.*, p. 203, quote attributed to Lt. Col. Hayden W. Withers, Ch/Plans Br, Med Plans and Svcs Div, Ofc of Air Surgeon, in a memo to Mr. Garver, subject Medical Service for the United States Air Force, December 12, 1947.
12. Dr. Hawley retired from the United States Army Medical Corps as a major general. When called from retirement to serve as chairman, he was the secretary of the American College of Surgeons. While Hawley's committee did not present its final report until July 1949, it served as a sounding board for medical planners to work on solutions of complex command and logistical problems.
13. Memorandum for the Secretary of the Air Force, from Maj. Gen. Malcolm C. Grow, the air surgeon, 3 January 1948, Subject: Medical Service for the United States Air Force.
14. Maj. Gen. Malcolm C. Grow presentation before the Hawley Board in March 1948.
15. Point paper on, The Medical Service and its Relationship with the USAF, on file in the Office of Air Force History under microfilm reel No. K1117, Call No. K141.282-1 May 1948-November 1949, Frame No. 1120.

The Alpena Adventure

By Col. Rick Gilbertson, DC

The too-good-to-be-true dream is about to become reality. That dream will be a self-contained training site for medical readiness training by mobility tasked units of the Air National Guard (ANG) and the United States Air Force Reserve (AFRES).

Under the bright and sunny skies of northern Michigan with just a hint of autumn in the air, a host of dignitaries witnessed a ribbon cutting ceremony for the Survivable Collective Protection System—Medical (SCPS-M). The system will soon be the centerpiece of the Alpena Medical Readiness Training site.

What is the System?

The system is a hardened facility located on a given base. A modular, concrete structure, positioned underground, it can protect medical staff and patients from blast overpressure, shrapnel and chemical agents in the external environment. It is designed to accommodate second echelon medical care.

In wartime, a SCPS-M will offer the first opportunity for professional medical care. It can be used to provide basic care to casualties, return to duty as many as possible in the shortest possible time, and stabilize the most seriously injured for evacuation. A 36-litter capacity holding area accommodates treated casualties awaiting departure. Each facility can handle approximately 70 patients per day. During surges however, that number of casualties could be treated in four hours.

Level of Care Provided

The new medical system will furnish a shirt sleeve environment where casualties can be decontaminated, triage and documentation performed, and emergency care given. This echelon, the second of four levels of casualty care, can provide a number of emergency measures. Chief among them are: chest tube insertion; establishment of intravenous routes via intracatheter; anesthetics; minor suturing; initial burn management, and emergency dental care. Surgical procedures are not within the range of the second echelon care.

The Long Road

According to Col. David Strate, chief of health services management for the ANG, the genesis of this effort was in 1984. The National Guard Bureau's Medical Readiness Section began investigating the possibility of opening an ANG medical readiness training site. During that time, the Air Force conducted Salty Demo, an air base operability exercise, at Spangdahlem, West Germany, and tested a prototype SCPS-M. Among the viewers were ANG officials who let it be known that the ANG wanted to participate in further refinements.

Developmental testing and evaluation continued at Systems Research Laboratory, Dayton, Ohio, while operational testing and evaluation took place at Ramstein AB, West Germany in 1987 and 1988. Medics from the ANG participated in both evaluations which were regarded as highly successful by inspectors.

The senior medical leadership of the Air Reserve components closely monitored the evolution of the SCPS-M. The ANG has 66 units tasked for second echelon care, and AFRES has 26 with that tasking. Together that represented 70 percent of the total Air Force second echelon requirement. How were these units to receive the necessary proficiency training?

Parallels To Europe

With a view towards developing a medical readiness training site and acquiring one of the two stateside prototype SCPS-Ms, the ANG surveyed several potential training locations. The permanent field training site at Alpena, Mich. was selected based on several factors. Significant among them was Alpena's close geographic and climatological match to central and northern Europe. In March 1988, the Air Force surgeon general approved the request to transfer the DT & E model from Dayton, Ohio, to Alpena, and the ANG.

In late Spring of 1989, the modules of the SCPS-M, each weighing more than 6,000 pounds, were installed below ground at the medical training area. The area includes refurbished living quarters, a dining hall and an administration building. There are heavily

TOUR OF PERMANENT field site for medical readiness training located below ground at Alpena, Mich. From left: Brig. Gen. David Arendts, air commander, Selfridge Air National Guard Base (ANGB), Mich; Brig. Gen. Donald Shepperd, deputy director, ANG; Lt. Col. Thomas Cutler, commander, permanent field training site, Alpena, conducting tour; right hand file is led by U.S. Rep. Robert W. Davis, 11th District, Mich.; followed by Maj. Gen. Vernon Andrews, adjutant general ANG, Mich., and Brig. Gen. Arthur Tesner, assistant adjutant general, ANG, Mich. Photo by TSgt. Craig E. Leaper, HQ, ANGSC, Andrews AFB.

wooded tracts for field exercises, and a small arms range is nearby. A staff of 10 was selected in November 1988. They attended an instructors course and a one week preceptorship under the supervision of the 3790th Medical Service Training Wing/Medical Service Reserve MSTW/MSR at Sheppard AFB, Texas.

Maj. Timothy Adams, chief of the medical readiness training section ANG plans to begin training ANG medical readiness squadrons in March 1990. Those two groups of 72 persons each will help validate the course while members of the 3790th MSTW observe. That unit will make future staff assistance visits.

The Alpena Experience

A full 15-day annual, active duty tour will be required to accomplish the training. The ANG Medical Readiness Division and the Air Force School of Health Care Sciences, developed a SCPS-M proficiency syllabus which takes five days to complete. The balance of the time will be allocated to continuous medical readiness training. By attending the course every three years, personnel can meet the requirements of Air Force Regulation 160-25. Additionally, Major Adams hopes to include aeromedical evacuation exercises in future courses.

Some 2,300 men and women of the reserve medical components are expected to be trained annually at Alpena. The knowledge they will gain and the lessons they will learn in this unique medical readiness training exemplify the finest traditions of the citizen soldier.

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Air Force Blue In Red Square

By Col. Ken Maffet, MC

Any Air Force career can provide opportunities for unexpected experiences. Not once, during my 20-year career, did it ever occur to me that I would have the chance to visit the Soviet Union. I never thought it possible for me to stand in the middle of Red Square in Moscow, dressed in Air Force service dress uniform, and admire beautiful St. Basil's Cathedral; or watch the changing of the guard at Lenin's Tomb; or be welcomed to the Soviet Union by a young Soviet citizen. All of this, and much more, became a reality in January 1989.

An agreement between the United States and the Union of Soviet Socialist Republics in 1988 made possible the first military medical exchange visit between our countries. It provided the basis for a tri-service group of 10 U.S. medical service officers to spend seven days in the Soviet Union touring some of their military medical facilities, meeting counterparts in their medical services and visiting locations we had never thought possible to see. In return, 10 senior Soviet military medical officers spent seven days in the United States visiting a variety of our facilities.

On one hand, our visit was very tightly controlled in that the schedule was preestablished, and there was little time to deviate from it. On the other hand, there were no restrictions placed on us when it came to what we could photograph, what questions would be answered or, time allowing, where we could go if we asked.

There was some apprehension when we were told we would be staying in Moscow at the Archangelskoe Sanitarium. However, in the Soviet Union, a sanitarium is a recreational and rest facility used by both vacationers and patients requiring rehabilitation for various illnesses. There are more than 100 of them throughout the Soviet Union. The Archangelskoe, a former home for the Czarist elite, is used primarily by cardiovascular patients requiring further rehabilitation outside of a hospital setting. There they receive exercise, diet education, rest and massages in a very relaxing atmosphere. For vacations, each military officer is allowed a two-week stay annually with his family in one of these facilities at markedly reduced cost and with travel provided by the government. We found the Archangelskoe to be beautiful and comfortable. Private rooms had a telephone, television, comfortable bed and bath.

The Soviet military medical service is the best their country has for the care of patients. From the quality of the facilities and equipment to the training of the care providers, what we saw could be expected to be much better than that which is available to the average Soviet citizen. With that in mind, it was striking to see the lack of state-of-the–art (by our standards) medical equipment. From cardiac monitoring to laboratory equipment, we saw capabilities that existed in the United States in the 1960's and early 1970's. Remarkable, too, was the lack of computerization and automation throughout the medical facilities. It was imparted to us that a major reason for that was the United States' embargo against export of computers to the Soviet Union.

From direct observation in their operating rooms to videos of operative outcomes we were impressed by the operative techniques of the surgeons and the results obtained. Of particular interest was a patient with a traumatic amputation of the middle fingers and thumb on one hand. Through a microvascular surgery video we observed the surgical reconstruction of a functional thumb using the patient's great toe.

ORs A Tremendous Contrast

Visiting the operating rooms provided a tremendous contrast to what we are accustomed to seeing. The emphasis we place on infection control appeared to be nonexistent. Two major neurosurgical operations were being performed at the same time in the same room; surgical masks were often worn below the nose; no special air handling system was apparent; and direct access into the operating rooms was not well controlled. When asked about their incidence of postoperative wound infections, the statistics provided did not vary significantly from our expected incidence. This possibly is due to the use of prophylactic antibiotics pre- and postoperative in almost every case.

A visit to a clinic supporting a tank garrison again showed a marked contrast in emphasis on infection control and preventive medicine. In a training environment with young cadets from all over the Soviet Union, there was little ventilation in the sleeping areas, beds were placed head to head, and were more crowded than we would permit. As might be

expected under these conditions, leading medical problems in the cadets were influenza, streptococcal infections and skin infections. Of interest was the use of cephalosporin or tetracycline in treatment of streptococcal infections due to the high incidence of penicillin sensitivity among the cadets.

In no medical facility was there any apparent evidence of a quality assurance program as we know it. Medical records of physicians are reviewed, and actions against them can be taken through transfers to other facilities. However, there is no means for prohibiting the physician from practicing through removal of his license.

Medical Retention Problem Solved

The leading medical school in the Soviet Union is the Kirov Academy in Leningrad—the military medical school. It is a huge facility consisting of 4200 beds and 260 buildings. Medical school consists of six years of training after a high school equivalent background. All military physicians graduate from the Kirov Academy. They either attend the academy for six years, or a civilian medical school for the first four years with the final two at the academy. The Soviet military medical service has solved any retention problems—each physician graduates from the Kirov Academy with a twenty-five year obligation to the military.

Doctors Move Across Service Branches

Much like the curriculum at the Uniformed Services University of Health Sciences (USUHS), each medical student receives training which prepares him for both the medical and military aspects of his future career. Unlike our USUHS graduates, they seldom spend their career in one branch of the service. They may well move between assignments with the Air Force, Army or Navy, depending on where they are needed.

There were aspects of their approach to military medical education which we greatly admired. Each of their physicians returns to the medical school or a large teaching hospital for a three-to-six-month refresher course every five years as part of his ongoing training. When a physician reaches a point in his career to be selected for a command or other leadership position, he returns to the Kirov Academy for a three-month executive management course.

Note that I write, "he" returns. In spite of the fact that the great majority of physicians in the Soviet Union are women, all physicians in the Soviet military are men. Women serve as nurses but only in the enlisted ranks.

Each physician receives more than 300 hours of training in aeromedical problems while attending the Kirov Academy. Soviet concerns in the flying environment are very similar to ours. The physical fitness of the aircrew, the psychological stresses which may impact on the aircrew member's performance, and the interchange between man and machine are all important to them. They are assigned to specific squadrons and are responsible for the health of that squadron. However, unlike our flight surgeons, they have no opportunity or requirement to fly with squadrons, even though they are required to examine the fighter pilots before every flight.

SOVIET NURSE in intensive care unit aboard Soviet hospital ship, **Enisei,** ***docked at Yalta on the Black Sea. Its 100-bed peacetime capacity is expandable to 350 beds. Photo by Col. Ken Maffet.***

***KIROV HOSPITAL** operating room where two major neurosurgical operations were being performed at the same time in the same room. Photo by Col. Ken Maffet.*

The Aviation and Space Institute in Moscow is their counterpart to our School of Aerospace Medicine. Their responsibilities for research, periodic evaluation or training of aircrew, and for recommendations to establish standards are similar. Their approach to some very basic aeromedical problems are very different. Whereas we emphasize the need for aircrew to recognize and avoid situations which may induce spatial disorientation, the Soviets believe that by repetitive exposure to disequilibrium, the threshold for the pilot can be raised, thus allowing him to be less susceptible to spatial disorientation. In training aircrew for tolerating gravity of G-forces, they appear to place primary emphasis on contraction of abdominal and leg muscles with little emphasis on breathing techniques. We observed a pilot take an 8 G centrifuge ride without difficulty while not changing his breathing pattern at all. The centrifuge at the Institute was very basic with a 9 G capability but with only 1-2 gravity forces per second during the rate of onset.

The most impressive medical facility visited was their hospital ship "Enisei" located in Yalta on the Black Sea. Built from the keel up in the shipyards of Poland to be a hospital ship, it was designed to sail with the Black Sea Fleet. With a 100-bed peacetime capacity, expandable to 350 beds, and a medical crew of 70-80 personnel including 20 physicians, "Enisei" was designed for efficiency and ease of transport of patients. As with all other medical facilities, however, it was outfitted with the most basic of medical equipment. A movie of shipboard life showed readiness exercises conducted in chemical protective gear. The ship did have a two-section hyperbaric chamber. One end was reportedly used for hyperbaric oxygen therapy and the other end for treatment of decompression sickness. The point was made often during our visit that the Soviets use hyperbaric oxygen therapy in a much wider range of illnesses than we do in the United States. Their treatment chambers range in size from a 50-person treatment chamber to single-person

portable units that were used during their military medical response to the Armenian earthquake.

Some Impressions

Apart from desiring to show us their medical facilities, our Soviet hosts spoke freely about political changes occurring in their country. They were openly supportive of Gorbachev's efforts directed toward glasnost and perestroika.

Not all of our visit was spent in their medical facilities. Our hosts provided opportunities for us to see some of the well known sites of their country. Red Square, the Moscow Circus, the Hermitage and Winter Palace in Leningrad, Livadia Palace (site of the signing of the 1945 Yalta Conference)—all left us with a desire to return to the Soviet Union and see more of it. In any trip such as this, there are moments which will never be forgotten:

The beautiful little girl outside the circus longingly looking to her mother for permission to accept our offer of chewing gum; and the smile on her face when told it was allowable.

Standing in the middle of Red Square in service dress uniform and being given the "thumbs up" when a young Soviet found out we were American military members visiting his country.

Laying a wreath at the Piskaryovskoye Cemetery in Leningrad where 600,000 civilians are buried who died during the 900 day siege of Leningrad during World War II. Hearing a toast from the senior military medical officer in the Soviet Union, "Americans should view perestroika as our initial attempts at correcting our mistakes."

Our delegation included Air Force officers: Brig. Gen. Rufus M. DeHart, Brig. Gen, Michael J. Torma, Col. Thomas M. McNish and Lt. Col. David C. Schutt. Before we left the United States we were advised that one of the purposes of our trip was to make friends. Friendships were made with great success in every place we visited.

Additionally, I found the Soviet military physician to be a dedicated professional with a basic desire to provide timely, high quality medical care to his patients. Hopefully, through continued contacts and future delegation exchanges, we can continue to share medical knowledge. There is much to learn in both countries.

Col. Ken Maffet is deputy director, Professional Affairs and Quality Assurance, Office of the Surgeon General, Bolling AFB, D.C.

***CENTRIFUGE GONDOLA** used to train Soviet fighter pilots.*

SOVIET SUBMARINE** school damage control exercise in progress.* ***Both above photos by Col. Ken Maffet.

TQM and Management's Responsibility

Lt. Col. Charles W. Boone, MSC
Maj. Debra A. Cavanaugh, MSC

"Quality is made in the boardroom. Service can never be better than top management intends it to be." (1)
— W. Edwards Deming

TQM is one of a number of leadership methods that can improve an organization's effectiveness. While it is not a totally new concept or designed to replace an alread effective management technique or quality assurance program, it offers useful management approaches to the MTF executive team.—Ed.

As DOD budgetary constraints tighten into the 1990s, the Air Force Medical Service must increasingly look toward internal efficiencies to fulfill its missions and achieve its goals. Total Quality Management (TQM) provides the management methods and the tools necessary to achieve internal efficiencies, enhance mission accomplishment, and continuously improve quality and productivity in U.S. Air Force medical facilities.

Air Force leaders have often cited people as being their greatest asset. Yet, traditionally, managers have used a small percentage of the brain power of their organizations to make decisions, solve problems, suggest improvements, and offer innovations. In TQM, the total intellect of the MTF is mobilized toward common objectives to meet a constant purpose: the continuous improvement of quality and productivity.

This article identifies management's responsibility for initiating and sustaining TQM and how the process is being implemented at the 26th Tactical Reconnaissance Wing (TRW) Clinic, Zweibrucken AB, West Germany.

The MTF commander's direct involvement and support is the single greatest factor that contributes to effective initiation of TQM. The commander must: lead the TQM process; clearly be its sponsor; and demonstrate strong and decisive support of TQM. The specific responsibilities of the commander are to:

- Communicate a clear vision of where the MTF is going.
- Question past and present MTF practices with a view toward constantly improving methods and service.
- Teach, reinforce and reward desired behavior and achievements associated with TQM.
- Provide frequent feedback and coaching to executive management team members and middle managers.
- Articulate and implement a philosophy of leadership and management based on continuous quality improvement, and do so in conjunction with the MTF executive committee.

Managers Become Leaders

Under TQM, managers at all levels become leaders. Executive committee members and middle managers must:

- Work with the MTF commander to develop and communicate a philosophy of leadership and management and a TQM implementation plan.
- Oversee and guide the TQM process in the MTF.
- Lead the TQM process in their functional areas.
- Coach their subordinates in the effective use of TQM strategies and problem solving tools.
- Encourage all MTF personnel to suggest improvements and serve on quality and productivity improvement teams.

The Zweibrucken Experience

The TQM approach began at the 26th TRW Clinic, in July 1988. The MTF commander first conducted a series of meetings with different groups of clinic personnel, ultimately discussing TQM with all 120 staff members. Seven questions used by the Hospital Corporation of America in its TQM approach (2) formed the foundation for discussion:

- Who are our customers?
- What do our customers currently brag about?
- What do we *wish* our customers would brag about?
- What are the barriers that could interfere with achieving goals of continuously improving the clinic and its services?
- What supports already exist that can help achieve goals of continuously improving the clinic and its services?
- What should be the definition of quality for our clinic?
- What are our opportunities for improvement?

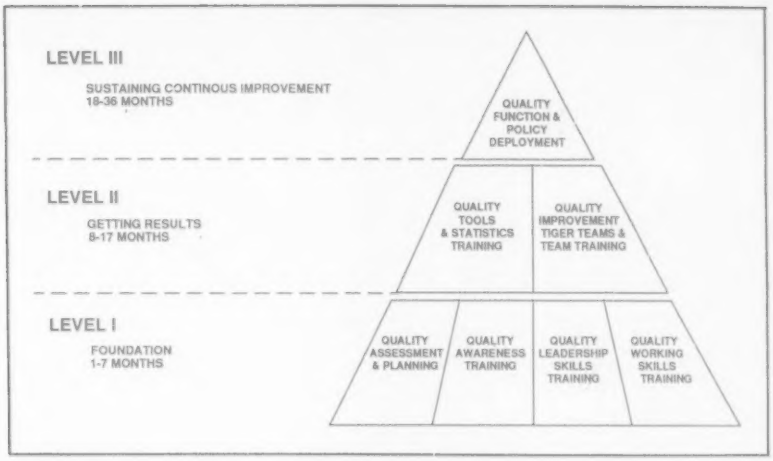
The process of answering these questions — and the answers themselves — formed an important foundation for initiating the TQM process.

The next step was to train the leadership to provide essential information and tools for executive committee members to facilitate the curriculum. That step included a review of the work of Drs. Deming (3) and J. M. Juran (4) ; Deming's 14 points (5) ; refinement of the clinic mission statement; development of a definition of quality; definition and examination of important clinic processes; and finally, employment of quality improvement "tiger teams" to develop action plans.

The executive management team agreed that the foundation for clinic goals should be the Air Force Medical Service Goals identified in the strategic planning document, AFMed 95-plus. Figure 1 shows the clinic leadership challenge associated with achieving the goals of continuous improvement and innovation in: readiness and operational support; facilities; customer service and access; health promotion; environment and human safety; and efficiency and effectivess. The challenge was to blend the MTF'S mission and emphasis on quality with organizational values to develop a leadership philosophy. That philosophy should lead to fulfillment of the goals and priorities of Air Force, major command, and wing.

The executive management team determined the leadership challenge could best be met through a three-pronged attack. First, all clinic personnel beginning with the leadership were instructed in TQM. Second, the executive committee created a candid and unrestricted exchange of information and ideas to improve services and methods of operation. Third, the leadership began a systematic effort to encourage, build, support, and reward teamwork as well as individual initiative and achievement.

The leadership developed an awareness, training and team building process that would provide the ingredients to sustain TQM during a 36 month period (Figure 2). Structured on three levels, the process included: laying the foundation (one to seven months); getting results (eight to 17 months); and sustaining continuous improvement (18 to 36 months). Within these three levels were the TQM building blocks that consisted of organizational climate assessment; and training in TQM philosophy, leadership, working, sta-



tistics, process improvement tools, and teamwork. The final building block was the deployment and institutionalization of quality in policy and functions throughout the clinic (Figure 2).

The clinic commander conveyed information through a series of progress reports, commanders calls, staff meetings, committee management, departmental meetings, training sessions, and smaller meetings so that all clinic personnel were informed.

Genuine Concern For People

While the TQM process is, by its nature, a long-term implementation process focused on achieving long-term results, a number of quick successes were noted at the 26th TRW Clinic. First, morale was improved as personnel sensed a change in leadership philosophy and style to emphasize teamwork, continuous improvement, and genuine concern for people and their ideas. Second, there was a tenfold increase in the number of Air Force suggestions submitted. During the first nine months under TQM, clinic personnel submitted 80 suggestions, compared to just eight during the same period the previous year. These 80 suggestions represented half the number of the entire base, although the clinic has only 3 percent of the base work force.

Third, 50 major opportunities for improvement were identified and 10 quality improvement "Tiger Teams" were established to work on them. These teams achieved a number of significant improvements including: better perception of the clinic by the wing leadership and the population served; improved facility and patient flow; streamlined committee meetings; creation of a more visible, energetic, and successful unit advisory council; and more accurate and timely officer and enlisted evaluation reports. Fourth, the clinic earned top notch ratings in a major readiness inspection, in large measure because of TQM.

Finally, we anticipate that traditional measures of productivity, patient visits for example, will increase in the last quarter of fiscal year 1989 and throughout fiscal 1990 as a result of efficiencies in patient scheduling and flow, and reduced variation in patient treatment and documentation.

As the Air Force Medical Service looks for methods of improving readiness, operational support, access to care, productivity, and quality in the healthcare encounter, TQM is the most promising one we have found at Zweibrucken. Its discovery follows many years of study and experience with different management approaches. Repeating an earlier point, the full support and leadership of the MTF executive management team is crucial to initiating and sustaining TQM in Air Force medical facilities. While it is still early in the TQM experience at the 26th TRW Clinic, early results indicate the future of TQM at the clinic looks promising. We recommend other MTFs study the approach, and we stand ready to answer questions and provide assistance wherever needed.

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Lt. Col Charles W. Boone, MSC, is commander, 26th Tactical Reconnaissance Wing Clinic, Zweibrucken AB, West Germany. Maj. Debra A. Cavanaugh, MSC is with Force Management Branch, Headquarters, Air Force Military Personnel Center, Raldolph AFB, Texas.

Dumb Sheets—A Smart Idea for Continuous Improvement

Organizational Change Through Individual Adjustment

By Col. Gerard R. Tuttle, BSC

How many times have you heard people say, "The way I have to do my job is dumb!" What do you suppose they would do if they had permission to design how it should be done?

The staff of USAF Medical Center, Wright-Patterson was given permission to do just that, this year. Within the context of training in Total Quality Management (TQM), emphasis was placed on the appropriateness of review of work activities by those closest to the tasks. The intent was to change those activities or processes which were not efficient. An underlying intent was to adjust the perception of individual workers about their ability to change how their daily tasks were carried out. The idea was to use the perception that the system can be changed in support of the medical center's goal: to create a total quality culture which meets or exceeds patient and staff expectations through continuous process improvement.

This article shows development of the review process. It also shows the transition from self-focused problem identification and review to culturally adjusted, customer-focused, process improvement. I believe use of the concepts learned can lead to individual adjustment, which is the basis for organizational change.

In December 1988, the commander advised the staff that it could suggest changes to any work process which was not producing effects originally intended. Work area supervisors were authorized to implement changes approved by management. However, the process for review was not defined other than to state that any idea could be brought to a member of the executive staff of the medical center responsible for quality process review. After two months, only a handful of ideas had risen to the executive level for review, one of which was a "real gem". Yet, two months after it appeared it still lacked approval.

That particular process required each inpatient chart to be "shuffled" after the patient was discharged. Air Force regulations mandated that clinical records arrange the forms in a sequence different from that used on the patient wards. The writer noted, "It takes 10 minutes of nursing staff time on the average to rearrange each chart." The suggestion was to use the AF mandated final sequence in building the chart on admission.

Nevertheless without a concrete method of directing change, ownership for implementing the change was not defined and no one furthered it. It was not until a discussion arose related to Crosby's, *Quality Without Tears* (1) concerning the cost of nonconformance that the real impact of this deficit took shape. From that point, it did not take a "rocket scientist" to see that if 10 minutes were spent resequencing each chart, with 120 discharges per month, nursing service was spending 200 hours monthly on the matter. In effect, we were losing the equivalent of one full-time employee a month. Depending on who was doing the work (ward clerk, technician or nurse), the cost could run as high as $32,000 per year—just shuffling charts! But, even worse was that two months after being identified, the action was continuing because no one acted.

Thus, the "Dumb Sheets" were developed out of the frustration related to the lack of a system to review and implement good ideas. The concept and its unusual name were borrowed from a similar program initiated at McClellan Air Force Base. With tongue in cheek, an acronym was later formed from a plea to "Dismantle Useless Minutiae in Bureaucracy" (DUMB).

DUMB sheets were recommended to the Director of the Quality Improvement Process (QIP). In two paragraphs the author was required to state the current process and the desired change. The plan was to evaluate and respond to suggestions within 48 hours. That proved to be too ambitious a goal because many of the ideas required a thorough evaluation. Now, ideas are forwarded through the QIP to a member of the executive staff most appropriate to supervise the evaluation.

A NEW IDEA is the Dumb Sheet recommendation to return responsibility for notification of positive pap smear findings to the referring physician. The idea was presented to project Excise and adopted by the Air Force Medical Service. From left are: Major John Baker, pathologist; MSgt. Ron Spencer and TSgt. Mark Smith, Cytology technicians at USAF Medical Center, Wright-Patterson AFB, Ohio.

A two-week turnaround is thought to be more realistic when differences have to be negotiated.

Preparing a Corpse

From March through July 1989, 121 ideas were submitted and 56 percent were approved for implementation. Although half were submitted within the first month, this group combined complaints with the system, "What I do that is dumb is attend lectures on total quality management," with recommendations to improve specific processes. Usually the focus was on relieving the writer of a particularly bothersome task. For example, archaic procedures were used when preparing a corpse for the morgue. In this case, the mortician evaluating the recommendation advised that discontinuing these procedures would result in fewer marks requiring cosmetics and therefore less distress to family members. This quality approach was quickly adopted.

While the number of DUMB sheets submitted declined in May to a total of nine, they increased to 16 during the months of June and July. More importantly, however, the focus of the latest suggestions changed toward improving processes that assisted patients or other staff. This occurred in concert with short lectures which emphasized how to define customer needs and meet the expectations of patients and staff to whom we provide services. As a result, nurses are no longer required to hand out bills to inpatients at the end of the month. The bills are sent to a home address instead. Military sick call in OB is now at the beginning of the day. The service is geared to patient needs instead of the staff schedule. In the future, all forms requiring inpatient stamp plate imprinting will have the block designed at the bottom of the page to save time and decrease frustration in the user.

Every process reviewed is a victory for both the reviewer and the organization. As a result, the executive staff has learned to pay attention to process review. What appears to be small may turn out to be very big, indeed. For example, a member of the laboratory suggested we choose more carefully the procedures sent to commercial laboratories and those to be

forwarded to Air Force facilities. This led to a review and consequent adjustment of the turnaround time process to Air Force laboratories. The result is an anticipated decrease in commercial laboratory use with potential annual savings of $100,00.

But, change is not all a case of "diamonds to be had for the picking." The right to ask a question is followed by the responsibility to question why something is done a specific way. One DUMB sheet writer portrayed a dilemma faced by some participants. "Why must DUMB sheets be forwarded through supervisors?" The anonymous writer believed some supervisors would not let ideas go through that could cause them to look bad. Further, there was the concern that repercussions could follow from a punitive supervisor. "Drive out fear!," said Deming. (2) Make sure that staff understands that all ideas are welcome and that no one is blamed for needed change. The message to be transmitted is: the way we have always done business is not the fault of any particular worker.

Finally, the impact of a DUMB sheet is not limited to either a work center or this medical center. One of the earlier ideas submitted calls for elimination of the requirement for cytology laboratories to send results directly to the patients. The suggestion was submitted to HQ/AFOMS Project EXCISE for review. We were notified that the recommendation was approved and the process was being changed throughout the Medical Service. The pipeline is open. If it no longer makes sense, change it.

The essence of a cultural revolution appears in the making. Lessons are being learned, but more importantly, they are being shared. Staff members at all levels are reviewing their work processes. Continuous process improvement can occur. When the processes are understood, non-value added behaviors and variations can be identified and removed. DUMB sheets or similar techniques can be learning tools for both the work force and management. They allow individuals to begin process review by looking at things that bother them directly. When they become confident that they can change the system, they expand their horizons to include their internal and external customers.

So, what do staff members at USAF Medical Center, Wright-Patterson, do when they realize that some of their work processes do not make sense? They change them!

Col. Gerard R. Tuttle is the director of Quality Process, USAF Medical Center, Wright-Patterson, Air Force Logistics Center, Wright-Patterson AFB, Ohio 45433-5300.

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MAJOR GENERAL SELECTIONS

President George H. Bush has nominated to the Senate for promotion to the grade of major general: Brig. Gen. Edgar R. Anderson Jr. and Brig. Gen. Donald J. Butz. General Anderson is command surgeon, Strategic Air Command. General Butz is the assistant surgeon general for Dental Services, Dental Corps.

Brig. Gen. Edgar R. Anderson Jr.

Brig. Gen. Donald J. Butz

Air Force Award Winners

Senior Dental NCO of the Year

SMSgt. John E. Morgenstern
RAF Upper Heyford, United Kingdom

Dental NCO of the Year

TSgt. Judith A. Cowan
Ramstein AB, Germany

Dental Airman of the Year

SRA Susan M. Grochowski
Seosterberg AB, Netherlands

Air Force Young Health Care Administrator of the Year

Capt. David E. Womack
Administrator
52nd Tactical Fighter Wing Clinic
Spangdahlem AB, Germany

Outstanding Medical Administration Award

MSgt. Randy L. Schott
Superintendent
Medical Force Management Branch
HQ AFMPC, Randolph AFB, Texas

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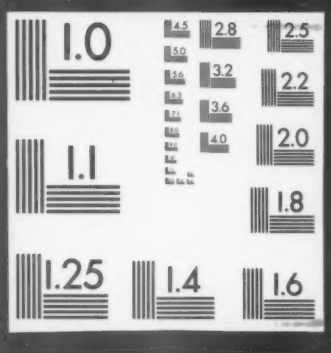
NEW DIRECTOR— *Col. (Dr.) Albert B. Briccetti is the new Director of Medical Plans and Resources Directorate, Office of the Surgeon General. Colonel Briccetti assumes his new post after being the deputy director for two years. The Mt. Kisco, N.Y., native received his bachelor's degree from Johns Hopkins University in 1962 and his medical degree from Georgetown University Medical School graduating magna cum laude. Colonel Briccetti completed his internship and residency at Bellevue Hospital and Sloan-Kettering Memorial Hospital for Cancer and Allied diseases in New York City. He completed his last year of residency at Beth Israel Hospital, Boston, Mass., and his rheumatology fellowship at Boston University and Boston City Hospital in 1971. He was certified by the National Board of Medical Examiners in 1967, the American Board of Internal Medicine in 1971, and then certified in rheumatology in 1972.*

Colonel Briccetti's first assignment was as a staff rheumatologist at Malcolm Grow USAF Medical Center in 1971. From 1972-1976, he was the chief, Internal Medicine Service and chief, Rheumatology Service. In 1976, he became chairman, Department of Medicine at Malcolm Grow. From 1981-1984, he was command surgeon and hospital commander at the United States Air Force Academy in Colorado. The colonel then became the commander of USAF Hospital Torrejon and 16th Air Force surgeon in Spain. He was selected to become the deputy command surgeon, Headquarters, U.S. Air Force Europe at Ramstein AB, Germany in 1985. In 1987, Col. Briccetti became deputy director, Medical Plans and Resources Directorate.

He is a graduate of Squadron Officer's School, Air Command and Staff College and an outstanding graduate of the Air War College. His memberships include the Air Force Association, Association of Military Surgeons of the United States, fellow of the Aerospace Medical Association, founding fellow of the American College of Rheumatology Association, fellow and Air Force governor of the American College of Physicians, historian and past president of the Society of Air Force Physicians, and member of the American Academy of Medical Directors. He has also held many academic appointments including an associate professor of medicine, Uniformed Services University of Health Sciences, Bethesda, Md., since 1976. Colonel and Mrs. Briccetti, the former Mary Heelan of Colorado Springs, Colo., live in Ft. Washington, Md. They have two children, Mark and Christine.

Red square by night

Kremlin sites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